

ABSTRACT

In one aspect, a method for encoding pictures is provided. The method is applied to each picture in a sequence of pictures, and the method comprises the steps of assigning a pre-decoder buffer removal time to the picture; selecting, for the picture, a number of bits, wherein the time-equivalent of the number of bits is no greater than a difference based on the pre-decoder buffer removal time of the picture and an initial arrival time of the picture into a pre-decoder buffer; and compressing the picture to generate the number of bits. The method may further include the step of allocating a first number of bits for compressing the picture and one or more number of bits for compressing one or more future pictures, wherein the future pictures are in the pre-decoder buffer at the pre-decoder buffer removal time of the current picture.